

**Before the
Federal Communications Commission
Washington, D.C. 20054**

In the Matter of)	
)	
Review of the)	EB Docket No. 04-296
Emergency Alert System)	
)	

REPLY COMMENTS OF LOGICACMG PLC

LogicaCMG plc (“LogicaCMG”) hereby replies to comments filed in response to the Notice of Proposed Rulemaking (“*Notice*”) in the above-captioned Federal Communication Commission (“FCC” or “Commission”) proceeding relating to needed changes to the Emergency Alert System (“EAS”). LogicaCMG, a major international company providing information technology and systems management services to the wireless industry in the United States and throughout the world, submitted comments in response to the *Notice* advocating the incorporation of cell broadcast technology into an updated EAS.

LogicaCMG offers the Commission reply comments relating to comments addressing the issue of the use of cell phones in an updated and expanded EAS.

I. COMMENTERS AGREE THERE IS NO SINGLE, PERFECT ANSWER TO IMPROVING THE EFFECTIVENESS OF THE EAS.

Perhaps the only generally agreed upon point reflected in the submitted comments is that there is no single, perfect answer to what should be done to improve the

effectiveness of the EAS. LogicaCMG agrees, but urges the Commission not to let the pursuit of the perfect interfere with the adoption of the good. Substantial advances in public safety are possible.

Some approaches, like cell broadcasting, may take a few years to reach their full potential, but even the immediate benefits are significant. Cell broadcast technology offers the possibility of expanding the EAS to reach 169 million cell phone users¹ wherever they are, and to reach them wherever they are located as they react to the emergency alert. Expanding the penetration of the EAS system to millions of wireless subscribers simultaneously provides a significant opportunity to advance the level of safety provided by an emergency alert system.

II. COMMENTS RELATING TO CELL PHONES MUST BE DISTINGUISHED DEPENDING ON WHETHER THEY ARE ADDRESSING CURRENT OR FUTURE CAPABILITIES

Several commenters addressed the issue of cell phones and their possible role in an expanded and updated EAS.² Most, however, addressed the way cellular phones are used today, not the way they could be used in the future.³ The potential use of cell phones today is very different from their potential tomorrow.

The comments of Corr Wireless, for example, state that cellular phones are currently not a good vehicle for sending multi-point messages.⁴ LogicaCMG agrees, even though LogicaCMG is the world leader in the message service available today through cellular phones -- short message service ("SMS").

¹ CTIA Semi-Annual Wireless Industry Survey (June 2004).

² See, e.g., Comments of SWN Communications, Inc.; Comments of Intrado Inc.; Comments of the Rehabilitation Engineering Research Center on Telecommunications Access. Unless otherwise indicated, citations to comments are to those filed in the captioned docket.

³ See, e.g., Comment/s of Corr Wireless Communications, LLC ("Corr Wireless").

⁴ See *id.*

SMS is not an appropriate way in which to provide emergency alert messages to the public. As correctly pointed out by Corr Wireless, when call volume is high, as it certainly was on 9/11 and certainly would be in any other emergency situation, neither voice calls nor SMS can typically get through the congestion overwhelming the network.⁵ Among other reasons, the use by SMS and voice calls of the same call set-up channel make both susceptible to blocked calls as a result of network congestion.

However, with the activation of cell broadcast, the situation is very different. Cell broadcast channels are dedicated channels that do not use the same set-up channel as voice and SMS. An emergency alert message sent over a cell broadcast network to cell phones in a particular geographic region or nationwide can get through to cell phone users when a network is overwhelmed by voice and SMS traffic. Being able to reach even a portion of the 169 million cell phone users and to keep reaching them as they respond to emergency messages is a giant leap forward in the ability of the EAS to save lives and prevent injuries.

The role of cell phones and wireless networks are already changing rapidly. Wireless handsets are no longer used exclusively for voice communications. Rather wireless handsets and networks have become a gateway for multiple communication technologies and media -- including voice, text, pictures, video and the internet. Cell broadcasting is one more way in which the potential of wireless networks will advance in the near future. Cell broadcasting capability is already built into GSM networks and has been standardized into the CDMA network, although not implemented widely.

Cell broadcast services are coming. How the 999 cell broadcast channels available through cell phones are put to use remains a question primarily for the private

⁵ *Id.* at 3-4.

sector, but in the instance of emergency alert messages, the FCC has the opportunity to take advantage of this technology and achieve a major improvement in the safety and security of the country.

III. “BARRIERS” TO CELL BROADCASTING CITED BY COMMENTERS ARE NOT SUFFICIENT TO PRECLUDE INCORPORATION OF CELL BROADCAST TECHNOLOGY INTO THE EAS

In the *Notice*, the Commission asked whether there were any practical barriers to the suggestions for improvements being advocated by commenters.⁶ Comments that addressed cell broadcasting expressed differing views.

The Cellular Emergency Alert Service association (“CEASa”), for example, considers cell broadcast to be an “ideal” platform for mitigating emergency situations.⁷ CEASa believes the underutilized cell broadcast spectrum capability of GSM and CDMA cellular systems provide a suitable way in which to get emergency messages through the “last mile” of the public warning system.⁸ CEASa also noted their participation in a recent test of the GSM infrastructure and cell phones in the United States, verifying the operational capability of the system.

LogicaCMG concurs with the CEASa assessment that the system is available, operational, and ready to be used in the GSM networks, with the addition of cell broadcast centers and other systems and equipment necessary to delivery cell broadcast messages to cell broadcast networks. As noted previously, additional work would be necessary to implement cell broadcasting through the CDMA network.

⁶ Notice at ¶ 32.

⁷ Comments of CEASa at 4.

⁸ *Id.* at 6.

The Rural Cellular Association (“RCA”) noted certain “problems” with the cell broadcast system.⁹ LogicaCMG does not agree that these “problems” are major issues with the incorporation of cell broadcast technology into the EAS. Some of the concerns cited by RCA are characteristics inherent in any broadcast system; others can easily be addressed in the deployment of the technology, or already have been addressed.

For example, one of the “problems” noted by RCA is that cell broadcast messages are not acknowledged.¹⁰ Of course, neither are television, radio, internet, or other types of broadcast messages. Individual acknowledgments are not necessary in order to get the message out the population. In addition, requiring a “receipt notifications” capability could serve to bog the network and the system down, both in terms of the simultaneous upload of thousands or millions of return receipts, as well as to the extent there would be any expectation that such acknowledgements would need to be dealt with by network operations centers in any sort of real-time scenario.

Similarly, the fact that a cell phone needs to be turned on to receive a message is no more a problem for cell broadcasting than it is for television or radio. Just as people can turn on a television or radio for updates, so too can cell phones be turned on for updates through cell broadcasting. In addition, market forces will drive the incorporation into any of these broadcast mediums the ability for the instrument to be turned on automatically in response to an emergency alert, should consumers demand such a capability.

RCA also contends that cellular systems “were not designed to disseminate Presidential messages or other emergency information simultaneously to all cellular

⁹ Comments of the Rural Cellular Association, p.9.

¹⁰ *Id.*

subscribers, nor are they easily modifiable to offer that capacity.”¹¹ Regardless of whether the maximum length of an emergency message exceeds the maximum length of a cell broadcast message, the current character limitation of cell broadcast messages (almost 140 words, assuming an average word length of 10 letters) does not de-value the ability of cell broadcast to issue public safety emergency alerts. In addition, cell broadcasting would be just one element of an updated EAS. While cell broadcasting alerts might contain abbreviated “bursty” messages commensurate with the immediate exigencies of an emergency situation, the public would have access to and could be directed to alternative sources for more detailed messages and coverage.

Other issues raised regarding the presentation of the message are issues that future technology advances can address. Handset issues, for example, have already been the subject of a White Paper by the Cell Broadcast Forum and can be found at www.cellbroadcastforum.org.

Cell broadcast also requires a network to have a cell broadcast center (“CBC”) to retransmit received messages. CBCs are “outside the wireless carrier network” as noted by the “White Paper on Emergency Alert Systems using Cellular Technology,” October 2004 submitted on behalf of the RCA (“RCA White Paper”), but only from a standards perspective. Physically, CBCs can be incorporated into a carrier’s network or could be “hosted” by a third party. Operationally, a CBC maintains a database of network cell locations, identifies which ones to alert, and verifies the message being sent. CBCs can also handle the wide variety of operating technologies incorporated into cellular

¹¹ *Id.* at 3.

networks. Variations in technologies is not a significant complication to implementation as stated by RCA.¹²

Importantly, GSM cell phones do not have to be modified to offer cell broadcast capacity. Cell broadcast is part of the GSM system. As discussed in more detail in LogicaCMG's initial comments, cell broadcast capability only needs to be activated in GSM networks and phones.

Some commenters have suggested that weather radio receivers should be added to each cell phone and the weather alert system relied upon to provide any needed emergency alert messages.¹³ Under this proposal, however, all cell phones would have to be replaced. The consumer would bear the full cost of such a change. In contrast, cell broadcast capability is currently available in GSM phones. Making use of that capability avoids the need to replace millions of phones. Moreover, as LogicaCMG has proposed, if a consumer chooses to activate the commercial channels of a cell broadcast system, these commercial alerts can provide one source of financial support for a cell broadcast emergency alert system, rather than placing the cost exclusively on the consumer.

IV. CELL BROADCAST AND THE WIRELESS PRIORITY SYSTEM ARE COMPLEMENTARY

As noted by the comments of the Cellular Telecommunications Industry Association ("CTIA"),¹⁴ following 9/11, the wireless industry developed the Wireless Priority System ("WPS") to assure federal, state, and local emergency workers that they would be able to communicate if another disaster struck. WPS cannot, however, get

¹² *Id.*

¹³ *Id.* at 4.

¹⁴ Comments of CTIA, p.4.

messages out to members of the public, and in fact, assumes that use of wireless networks by non-first responder subscribers will likely be blocked. That function, however, can be provided by cell broadcasting. Even if voice use by non-priority subscribers are blocked in an emergency, subscribers would still be able to receive cell broadcast messages and share needed information with others who also might be in danger.

V. CONCLUSION

LogicaCMG continues to support the adoption of cell broadcasting into the delivery system for emergency alert messages and urges the Commission to require that several cell broadcast channels be allocated exclusively for these messages. In addition, LogicaCMG urges the Commission to consider implementing cell broadcasting through a pilot program using a public/private partnership that would include initial government assistance to carriers to purchase needed equipment and to address funding issues for the system going forward.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on this 29th day of November 2004, a copy of the foregoing Reply Comments of LogicaCMG PLC were served, via United States first class mail, postage prepaid on the following persons:

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